

Mines offers veterans an education

Sophie Hancock
Staff Writer

Here at the Colorado School of Mines (CSM) we are proud of our diversity. A quick search on the CSM homepage shows that the student population comes from over 60 countries. But there is another small sector of the student body that come from much closer to home – American students supported by the Veteran's Association. One such student, AJ Neuman, discussed a little more about the Veteran's Association (VA) in a conversation that would reveal a lot more about Neuman and the world from which he comes.

Picking up Neuman's story, coming to Mines to study is fulfilling long held ambitions to learn engineering, with which many Mines students can relate. He is supported by the VA following medical discharge from the US Navy. After completing various military duties, not least of all serving full-time sea duty in the West Pac region, Neuman has also had personal experience with co-veteran amputees who have been medically discharged from service due to the physical limits of their post-amputation rehabilitation. Seeing the challenges and hardships of such servicemen and women, Neuman has enrolled along with approximately 200 students in the BELS program, part of which includes a B.S. Bioengineering minor option. Faculty Professor

Joel Bach said "this is the fastest growing program at Mines – we only started this option in 2003".

The Veteran's Association runs two specific programs to support its veterans. First, the group offers Vocational Counseling (VoC).

This service provides vocational-educational counseling to veterans and certain dependents and can be very broad. Assistance could mean aptitude testing, setting occupational goals, supporting the individual, helping identify the right type of training program, as well as other forms of practical help. In tens of cases per year, this results in veterans being given the opportunity and financial backing to prepare and enter tertiary education. The program has at least three such students enrolled in Bachelors' programs currently at CSM.

To enable this program, funds were set up under a GI bill, enabling ex-veterans with 30 months or more military service to receive substantial tuition assistance to support their studies and post-military life aspirations. This bill is often referred to as 'Chapter 31,' but its formal name is Title 38, Code of Federal Regulations, Chapter 31. It is under this legal framework that the VoC Program is run.

A second program for Rehabilitation is also run by the Vocational Rehabilitation & Employment Program Services (VR&E), with a stated mission to help veterans

with service-connected disabilities prepare for, find and keep suitable jobs, just like Career Services on campus. For veterans with service-connected disabilities so severe that they cannot immediately consider work, VR&E offers services to improve their ability to live as independently as possible. It is this rehabilitation program which provides physical evaluations and rehabilitation to determine abilities, skills and needs and works with the veterans to empower them. The two driving forces behind this are to provide a better quality of life, going beyond those skills developed through traditional military training and operations and to increase the individual's job market potential.

Neuman shared an inspirational story about one ex-veteran's vision for bettering the lives of fellow amputee (or multiple amputee) veterans. One can imagine that the active personnel within the military would find it difficult to be dependents, so those who are facing up to life as discharged amputees have a hard time accepting their reduced activity limits – and many suffer mental illness and depression in trying to make this adjustment. Social isolation where mobility is a problem is also often acute, as are financial hardships.

SEE THE REST OF THIS
ARTICLE ONLINE AT
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Be a hero, save a child

Up 'til Dawn active at CSM

Emma Janisch
Staff Writer

"The Up 'til Dawn program is a campus-wide philanthropic event," said Annette Burleson, a member of the Up 'til Dawn committee. Throughout the Fall and Spring semesters, Colorado School of Mines students and the Up 'til Dawn committee raise money and increase awareness for St. Jude Children's Hospital by conducting various fundraisers. During homecoming week the group held awareness days on campus to educate their peers on the work St. Jude does for children. They handed out stickers and pamphlets with stories of those patients in need, along with some very delicious cookies.

The program's main fundraiser is the All Campus Party, which is a letter writing campaign event.

"Students register in teams of about 5 and each person in that team brings in 50 addresses to send letters to. The letters are already pre-written; all they have to do is address the letter and the envelope. The letters ask for donations for St. Jude Children's Hospital. Students do not have to bring 50 addresses; it is just an incentive for getting a free t-shirt. The letter-writing event will last from 5pm - 10 pm and is an open house so you can come whenever!" said Burleson.

"This group is ready to have some fun and help some children and they will take anyone who wants to help," said Merika Treants, president of the Up 'til Dawn committee. "So grab a group of your friends and make a difference. I think too many people at this school get so involved in school and their own

life they don't even take a second to do this. I think it is important for people to be more well-rounded and help out," said Treants. "Set down that textbook and take a few hours out of your busy schedule and do something that truly has a purpose."

In the spring, the grand total of funds will be revealed at the final event, where all those who contributed will celebrate their success by staying up until dawn. Treants said, "We haven't decided if we are going to stay up till dawn but that's the thing – no child should die in the dawn of light. That's why it is called Up 'til Dawn." Regardless if the participants make it all the way to dawn, there will still be games, food and even door prizes for those who attend.

SEE UP 'TIL DAWN ON PAGE 6

Lights and sound

The 'M' goes green and Green River Ordinance kicks off Homecoming



ANDREW FERGUSON / OREDIGGER

Going Green. The light source of the M transitions from incandescent bulbs to energy-efficient LEDs.

Tim Weilert
Content Manager

Friday night, as the sun began to set and the Homecoming field events wrapped up, the M on Mount Zion began slowly flickering on, as it had done for decades. However, Friday night was different. After a few quick speeches from members of Blue Key and Golden Mayor Jacob Smith, the dull yellow lights disappeared as the bright white light of energy-efficient LEDs began to shine. According to Blue Key, the old bulbs cost approximately \$2300 a year to maintain, while the new LED bulbs will only cost around \$180.

Following the ceremony was the Homecoming concert, which featured Ft. Worth, Texas band Green River Ordinance (GRO). After dropping out of college during their senior year, the members of GRO set out to follow their dreams of a becoming successful with music. Jamey Ice, GRO's guitarist, said "We were going to take a year off and our parents said 'We'll give you one year, and if you don't get a record deal you have to go back to school.' That year it worked out really well, we sold a bunch of

records, toured the country and signed to Capitol Records last October."

As a band that lists the likes of Jimmy Eat World, U2, Matchbox 20 and Third Eye Blind as their influences, Green River Ordinance lived up to expectations that night. Their set started off slowly, and after playing a mellow opening song, the band invited the crowd to gather in and enjoy the show. As the night cooled off, the crowd warmed up. Green River Ordinance played through a number of catchy tunes and even threw in a cover of Tom Petty's "Free Falling" toward the end of the set.

After playing for nearly an hour and a half, the concert was over. "I thought the show was pretty cool," said Ryan Hild, "It was nice and relaxed; the band played well." Other CSM students shared Hild's sentiments. "I thought it was totally awesome," said Drew Meyer, "I thought they had a really crisp, clean sound and I really liked listening to them."

Green River Ordinance plans on touring the east coast in the near future, then supporting their record, which comes out in February 2009.



EMMA JANISCH / OREDIGGER

Stay up late. Volunteers for St. Jude encourage students to sign up for Up 'til Dawn.

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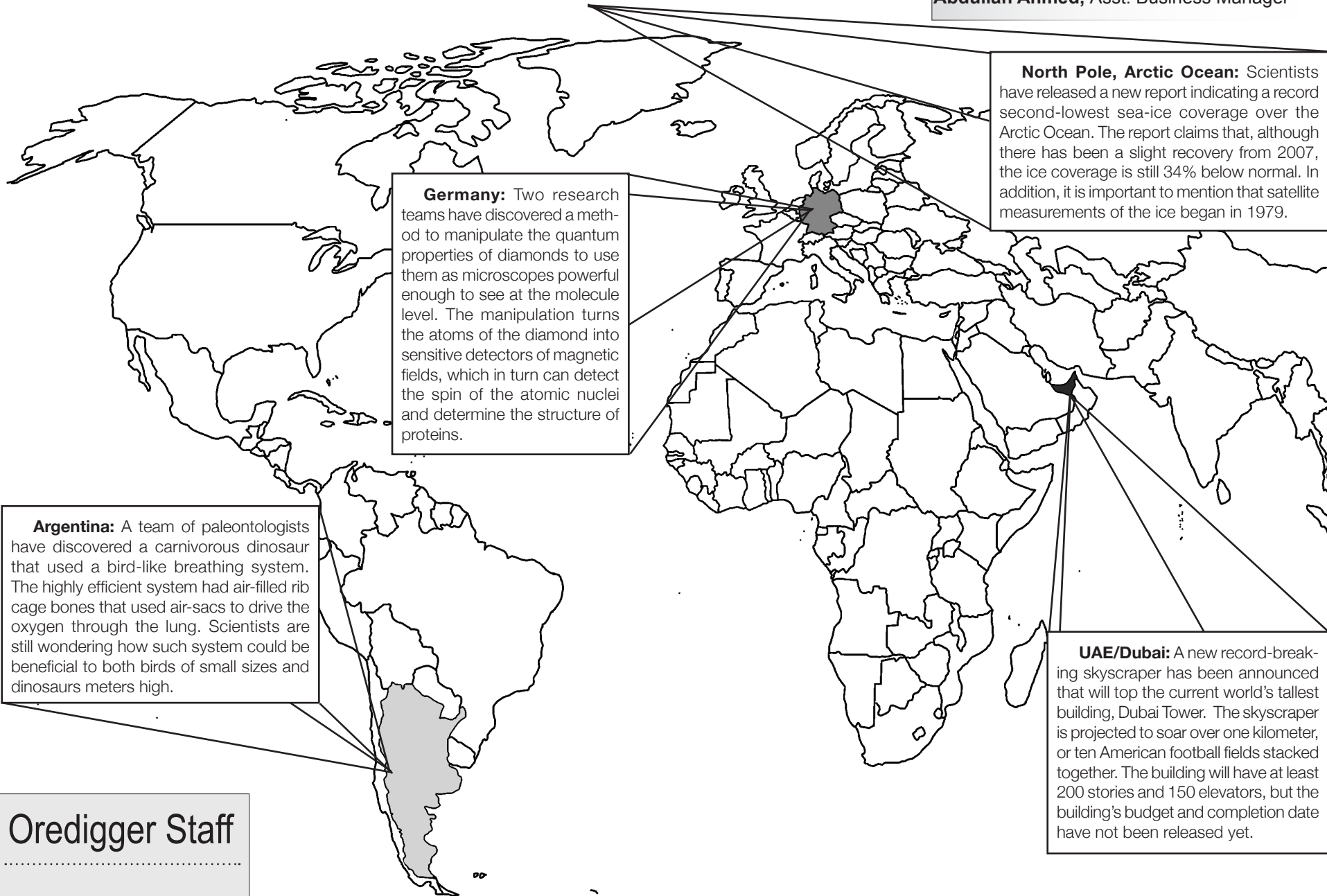
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Scientific discoveries this week

Abdullah Ahmed, Asst. Business Manager



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Headlines from around the world

Emily Trudell, Staff Writer

Vice presidential candidates **Joe Biden** and **Sarah Palin** debated in their one and only scheduled debate of this presidential race last Thursday.

Melamine, the chemical that caused illness in thousands of babies in **China** after it was leaked into baby food, has been found in more food products made by Chinese factories.

The United States announced its plans Friday to sell over 6.4 billion dollars worth of weapons to **Taiwan**, including Apache helicopters, Javelin anti-tank missiles, and Harpoon missiles.

The world's heaviest man, **Manuel Uribe**, who has recently lost 550 pounds (going from 1230 to 700 pounds), and is set to wed his long time fiancé **Claudia Solis** at their home in Monterrey, Mexico.

Congress passed the Paul Wellstone and Pete Domenici **Mental Health Parity & Addiction Equity Act of 2008**, a bill that will require insurance companies to provide better mental health coverage.

Astronauts from **China's** first ever **spacewalk** returned home to Earth in their capsule after a successful mission.

A seven-year-old boy broke into Sydney, Australia's popular **Outback Zoo**, killing 13 reptiles by throwing them into the crocodile pit with the zoo's 440 pound crocodile, eventually causing roughly **5,500 dollars in damage**. Because of his age, the boy cannot be criminally charged, but it is likely that the zoo will sue his parents.

After it was falsely reported Friday morning that **Steve Jobs** had suffered a heart attack, Apple stocks fell 10 percent in only ten minutes, and closed low before the weekend.

After two weeks of debate, the **bailout deal** was signed into law allowing the Treasury Secretary to purchase up to \$700 billion worth of troubled assets to kick-start the United States economy.

Israeli officials warned **Hezbollah** that they will use "disproportionate force" if the militant Islamic group attacks Israel. They also said that any community found firing missiles at the Israeli nation will be annihilated.

A **United States** missile attack

in a region of Pakistan known for its Taliban and Al Qaeda connections killed at least nine people, with some reports stating that the death toll was closer to 20.

The diary of **Ilan Ramon**, Israel's first astronaut, is on display in Jerusalem for the first time after the **Columbia crash**, which killed Ramon and his six crewmates in 2003.

California governor **Arnold Schwarzenegger** wrote

to **Treasury Secretary Henry Paulson** this week, asking for a loan of seven billion dollars in order to maintain day-to-day operations in the state of California.

Iraq's President **Jalal Talabani** signed a law that allows for U.S.-supervised provincial elections to be held in January.

Former brothel owner and **sex industry tycoon Chuwit Kamolvisit** is running for the role of governor of Bangkok, Thailand.



Uranium | Past, present, and future

Sophie Hancock
Staff Writer

The latest in the Van Tuyl geology lecture series was given by Faculty Professor Emeritus Sam Romberger. Romberger's research has focused on aspects of economic geology and aqueous geochemistry whilst working alongside the uranium mining industry. The lecture presented a concise review of the current challenges facing the uranium industry (waste disposal, security and fuel supply) and a brief history of its development before turning attention to various aspects of the last decade.

Romberger explained some of the more unusual ways that uranium can be characterized compared to other minerals and energy sources. One statement pointed out that 96% of the global uranium supply is mined at only twelve locations. Three of the operational mines are located in Australia.

As uranium is such a concentrated energy source, a mere one kilogram of fuel can provide 50,000 kilowatt-hours of power. One chart showed that Lithuania produces 76% of its power from nuclear energy, all from its one and only nuclear facility, a testament to the vast energy supply potential.

As of 2007, thirty countries operate upwards of 439 reactors of varying ages and designs, collectively providing 16% of global power capacity. This nuclear energy production displaces the equivalent of half a gigaton of carbon each year.

Here in the US, a quarter of energy produced comes from nuclear power plants, although there is a huge trade deficit since over 90% of the required yellowcake (unrefined uranium) is imported to be enriched and fabricated into the fuel rods which plants actually use in their reactors.

This is also a global problem, as recent uranium fuel supplies have been utilizing reprocessed uranium from military sources, notably Russia, and these supplies are almost exhausted. To compound this situation, the nuclear power plant building programs around the world are being expanded so much that in many countries fuel demand is outstripping supply. These and other economic factors are driving the search for uranium and have resulted in significant Uranium-308 price increases, peaking at \$135 per pound in the summer of 2007.

From 2003 to the present, major advances in uranium geochemistry have occurred, simultaneous with the current, fourth uranium exploration boom. These advances have been primarily made in fundamental revision of the genetic models of many uranium deposit types and in particular, their geochemistry. Romberger explained that due to the almost uniquely complex and complicated uranium geochemistry, uranium can be found in more types of geological environments and deposit types than other metallic commodities.

Applied mineral deposit research is



ANDREW FERGUSON / OREDIGGER

Rare commodity. Worldwide uranium supply originates at only 12 mines.

building on these model refinements, and is rapidly entering the exploration marketplace as prospectors bring new geochemical interpretations to their exploration data in the search for additional uranium reserves. These geochemical developments also result in new tools and technologies for uranium. As a result of these developments, new strategies and approaches are being brought to the search for future uranium supplies.

The Van Tuyl lecture series covers a wide range of topics relating to the geosciences, primarily geology and geological engineering. The lectures are held most Thursdays at 4pm in Berthoud Hall 241 and the Fall 2008 series calendar is available on the Geology & Geological Engineering homepage.

Semiconductor spin

Benjamin M. Weilert
Staff Writer

Semiconductors are one of technology's ever-growing fields. New advances in this arena allow electronics to get ever smaller. The base of all electronics is the electron, which has a physical property known as spin. "Spin is such a profound degree of freedom," said Christoph Boehme during his Tuesday colloquium lecture to the Physics department, entitled "Applications of spin-dependent processes in semiconductors".

Boehme, who works at the University of Utah's Physics department, has been researching the capabilities of spin using high magnetic fields, some of which have magnitudes approaching 200 times the magnetic field of Earth. The idea behind the research is to observe the changes in different materials. He explained, "[Spin] can greatly influence conductivity, [and] optical properties such as luminescence." These properties can be used to produce such products as flexible video screens.

As with most experiments, there needs to be a certain level of control in order to obtain viable data. "By using a pulse magnetic resonance experiment, we essentially control the observables," said Boehme. The 'observable' data from this experiment is a change in current. This is important for detecting spin, "We get an imprint on this current transient by the spin rotation."

However, the spin rotation can also be observed optically. When both observations are taken together, a more full picture emerges. "This is what's called electrically and optically detected magnetic resonance," said

Boehme.

In materials research, doping silicon with phosphorus is a large contributor to these spin-dependent processes. With it, such processes as spin-dependent recombination, spin-dependent scattering and spin trapping are possible. However, this is partly due to the properties of silicon itself. "Silicon is [the] best developed nanotechnology that we have already."

The main application of these spin-dependent processes is in organic light emitting diodes, or OLEDs. As these devices are a recent invention, some mysteries remain about their properties and the governing physical principles.

One of the areas under current focus is OLED efficiency. "What is the glass ceiling for the efficiency of these devices?" asked Boehme. It turns out that, with pure substances, the efficiency caps at 25%. With efficiency levels low, consideration must be given to energy conservation.

A useful side effect of research into spin-dependent processes is the emergence of knowledge in other aspects of the materials being studied. "Understanding spin-dependent transitions in organic materials is also important for the understanding of organic magnetoresistance effects," said Boehme. Most of these effects are due to the material's need to be in a steady state. "This is an attempt of the system to move towards equilibrium."

This research has many applications in the field of medicine (with such examples as magnetic resonance imaging (MRI)) and spin-to-charge conversion mechanisms for new spin electronics devices.

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Colorado School of Mines



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TECH BREAK

Ian Littman, Tech Break Columnist

Why you may not *need* to pay for an Office Suite

By now, if you are a student, you have probably had to make a decision about the office suite you are going to use while here at the Colorado School of Mines. You have either paid \$100 or more for Microsoft Office 2007 for Windows or you are out \$40 or more for Apple's iWork suite. Or maybe you have not bought either suite, opting for free alternatives, in which case you're better off than some might think.

True, Microsoft Office is the de facto standard for applications in its class, with its wide feature set and revamped user interface that, once you get used to it, is amazingly fast to use. On the other hand, there is Apple's relatively simple yet powerful iWork, always focused on presentation so that it is always ready to create reasonably detailed

page layouts with just a few clicks and make documents look snappy. The problem, though, is that iWork uses an *extremely* proprietary format (trust me, I've worked with it) and Microsoft Office's pricing starts off at expensive and ends at highway robbery depending on what credentials you have and the features you want. Plus, there's the matter of getting used to the infamous "Ribbon" UI, which has quite a learning curve.

The alternative: OpenOffice 3.

Now, before you hit the big Download button, direct your eyes to the right side of the OpenOffice.org home page. You will find that OpenOffice 3.0 is a beta release. With that in mind, download and install it. From my experimentation, it is rock solid. Just remember to check back at the OpenOffice site for when the final 3.0 version is released.

But why not use the current version of OpenOffice, version 2.4? Simply put, the new version intro-

duces a boatload of handy features that put the suite on par with its for-pay Microsoft and Apple brethren. Several new features in OpenOffice focus on compatibility with a certain UNIX-based operating system preloaded on certain machines made by the maker of the iPod. The software is no longer a long-to-load, square-peg-in-a-round-hole joke. The new OpenOffice integrates smoothly with Mac OS this time around, and even includes a few features (some VBA support and a "Solver" feature; more on that later) that Microsoft Office 2008 for Mac just doesn't have.

Also, OpenOffice is now more powerful. Although still dwarfed by Microsoft's 16,000 column

width limit on their spreadsheets, 1,024 columns on OpenOffice is a nice jump from the previous 256 and is beyond the range of most spreadsheet applications. Also, the Solver feature makes short work of everyday optimization problems, a nice touch for those of us who remember Calculus 3.

iWork uses an extremely proprietary format and Microsoft Office's pricing starts off at expensive and ends at highway robbery.

The open-source suite gets a facelift in this iteration as well. New icons, a quick zoom slider in the word processing application that allows for multiple pages onscreen at one time and a new, more useful way of displaying document notes are just a few of the usability improvements that bring OpenOffice right up to date from a user-friendly standpoint.

Last but not least, as open-

source file formats like ODF and PDF evolve, so does OpenOffice. OpenOffice 3.0 is within spec for both of these formats, allowing tons of control over PDF exports and keeping right in line with the OpenDocument standards that are open-source equivalents of the Word, Excel and PowerPoint files everyone knows so well (and OpenOffice can import). You can even import PDFs with a free extension and edit them.

In all honesty, OpenOffice 2 seemed to me to be a blast from the past, on par with Microsoft Office 2002 or so. On the Mac, it's worse. But OpenOffice 3 is another story. From a person who knows both Apple and Microsoft's own office suites, and thinks Office 2007 is worth at least the price of the student edition, there's a possibility that OpenOffice will become my tool of choice for word processing, spreadsheets, presentations and more. See it for yourself at <http://bit.ly/ooo30>.

Non-Geek of the Week

...Kyle Voget, Senior, Chemical Engineering

Benjamin Johnson
Staff Writer

[Oredigger] Do you think you are a geek?

[Voget] This feels like I am being interviewed for Geek of the Week, what the heck? On the outside no, but on the inside yes.

Do you have any geeky qualities?

I almost cried after my last math class.

What happened?

I was finished with my last Differential Equations test freshman year and realized I was taking the last math test I would ever take in my life, and I was legitimately saddened. Then I

realized I have to use it in all of my other classes, so I got

over it pretty fast.

Outside of Mines, do you think you are a geek?

No, I usually try to use normal language and not talk about homework with others.

Do you like it here at Mines?

Yes, the people here are great.

Why did you decide to come to Mines?

They sent me a free application and I thought an undergraduate degree in engineering would give me a practical education.

What clubs, activities, sports, or other organizations are you involved in on campus?

I'm currently in Campus Crusade For Christ and Pre-Med Society. I used to be in ping-pong club until it got revoked as a club my freshman year due to some ping-pong drama. I don't know if they still have the club. I play and have played a lot of intramural sports like flag football, basketball, racquetball, softball, etc.

What is your favorite sport?

Right now my favorite sport is basketball because I am in an advanced basketball class; it is hard to get court time now-days. I also like American football and especially like wrestling my brother.

What do you like to do in your free time?

What free time? If I had a choice I would probably try to get a little more sleep. I enjoy hiking, playing disc golf or Frisbee, ballin' at the Rec Center, and hanging out with friends.

What do you plan on doing after graduation?

Get married, and I would like to go to med school or even get a job as an engineer in the field of medicine. I know this isn't typical of Mines students, but I think it is becoming more and more popular.

Which medical schools are you interested in?

I don't know yet.

What are your three best traits?

I am easy to get along with, hard working and determined.

What are your three worst traits?

I don't have any musical skills, perfectionism can be a bad thing and I think a lot.

What is the geekiest thing you have seen or heard at Mines?

World of Warcraft being played in chemistry class.

What is a little known fact about you?

I created a text/instant message abbreviation in 2005 that has spread worldwide. "nbs" stands for "no, but seriously" and can be added after one says "j/k lol... nbs." NBS is also an organic chemical [known] as N-Bromosuccinimide.

Must See Movies: Fractured Storylines

Benjamin M. Weilert
Staff Writer

Occasionally a movie comes along that requires a second viewing. Most of the time, this is due to a fractured storyline. When the plot unfolds in a non-linear fashion, there are many details that can be missed the first time the film is seen. The following three movies require the audience to piece the story together, even if it takes a few views to do so.

1. Memento (2000)

Memento tells the story of Leonard (Guy Pearce) who suffers from short term memory loss and is searching for his wife's killer. To keep two interweaving storylines separate, one is presented in black and white, the other in color. The former progresses as a forward plot, while the latter gives a plot told in reverse. Therefore, when the movie starts, the audience gets a view of both the beginning and ending of the total plot, and watch as it progresses toward a climactic middle. The method of breaking up the storylines, both forward and in reverse, gives a greater understanding of the main character's memory loss condition, as the audience has seen what will happen, and not what has happened.

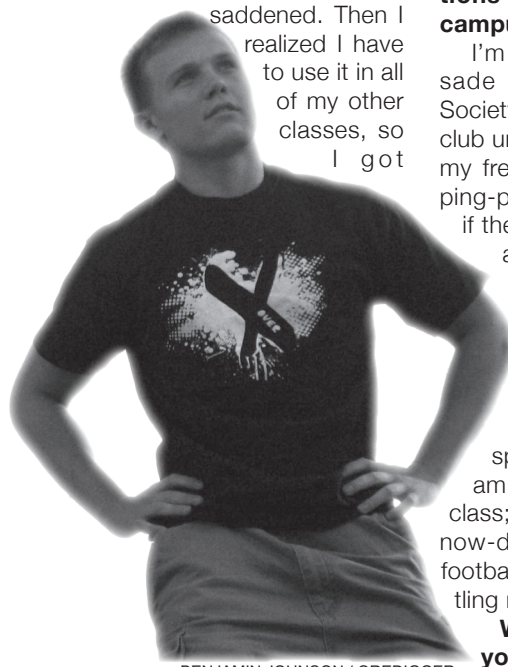
2. Pulp Fiction (1994)

Quite possibly Quentin Tarantino's best film, *Pulp Fiction* takes multiple stories and intertwines them in a clever and interesting way. The multiple plots include two hit men (Samuel L. Jackson & John Travolta) taking care of business, a boxer (Bruce Willis) running from a mob boss after he kills the man he was supposed to lose to, and a date between one of the hit men (John Travolta) and his boss' wife (Uma Thurman). Each of the storylines share similar characters, but are told in a non-linear fashion so that viewers will need to watch the movie again in order to put everything in order. *Pulp Fiction* won an Oscar for writing and sits comfortably at the bottom of the American Film Institute's (AFI) Top 100 list.

3. Unknown (2006)

Almost a tribute to its title, this somewhat obscure movie tells the story of five men who wake up locked in a chemical warehouse with no idea who they are or what they are doing there. As the film progresses, each of the characters has flashbacks that give insight to the background of their situation. Each character is suspicious of the others, since it appears early on that the situation involves kidnappers and hostages, with no one knowing if they're the ones being held, or doing the holding. With each progressing flashback, the audience learns more about the characters, sometimes switching between thinking someone is a protagonist to thinking he is an antagonist. This film saw limited release, and was somewhat overshadowed by the release of *Borat* during the same week, but is still worth renting on DVD.

For Homework – See *Sin City* (2005)



BENJAMIN JOHNSON / OREDIGGER

Free Ballin'. Kyle enjoys football, basketball, racquetball, softball, and ping-pong.

Film festival draws large crowds

Elliot Matthews
Staff Writer

The spark is struck and a fire now glows where one inspired soul has gathered other energetic personalities and resources together in the hope of enlightening the public.

This past weekend offered a unique opportunity for participants from near and far to experience a rare film festival. Headed by the Colorado Alliance for Environmental Education (CAEE), the third annual Colorado Environmental Film Festival ran from October 2 through 5 in the American Mountaineering Center (AMC), located in downtown Golden.

The brainchild of Shawna Crocker, an AMC employee, the festival's purpose is to provide a medium for environmental-focused filmmakers to show their films to a broad audience. Crocker explained how the whole idea came about after a chance viewing of a popular environmental film festival in Washington D.C., "I happened to be in Washington D.C. in March four years ago and I was stunned at the number of people attending the films. I mentioned the idea to CAEE and other natural resource organizations and everyone jumped on board immediately... It was an idea whose time had come."

Joe Brown, last year's third place winner and member of this year's Film Festival Committee, shared the same sentiment along

with the 'ups' and 'downs' of bringing this event to the public, "Films are a great way to inspire people who do not necessarily take the time to read into the issues facing our environment. Our goal is to provide a source of environmental education and awareness, and this film festival is a great way of doing that. In our first year, we had, I believe, under 100 people show up to the entire festival. Last year saw 600 participants, and this year we hope to have around a 1000. So, we are growing and hope to continue growing as the word gets out."

Brown went on to say that he would like to bring this kind of opportunity to the Colorado School of Mines in the form of a film screening. By working with environmental organizations and on-campus volunteers, such an event could be a real possibility in the next year.

At the festival, there were numerous notable faces, including Chief Meteorologist Mike Nelson of Denver's Channel 7 News. He spoke on the opening day of the festival and was followed by other keynote speakers, such as Patty Limerick from the Center of the American West and Mara LeGrand of Heart and Soil. Informed speakers helped embolden the context of the films, which ranged from the scientific aspect of a changing environment to the social impact.

Amidst the numerous environ-

mentally-themed films, the festival also showcased films of great variety and originality. All the films were thought provoking whether it was an animated short or full-length film, and the films thoroughly engaged the viewers. One such film entitled *The Last Hat in Town*, which was directed by Zachary Fink and produced by Soul Fabric Films, showcased the struggles of several Americans adapting to the complications brought about by the boom in oil and natural gas.

Other highlights of the event included presentations pertaining to the problem of never-ending trash. After a film entitled *eDump* on Friday night, which documented the effects of e-waste (electronic waste, such as computers) on developing countries, Matt McLaughlin of Guaranteed Recycling Xperts (GRX) gave a speech on the 'dirty little secrets' of e-waste and the many companies that supposedly recycle it. On Saturday, GRX followed up their presentation by providing people with the chance to recycle their e-waste for free.

Besides GRX, there were several other local eco-focused companies attending the festival. These companies all had exhibits of their products and services on display in an expo located below the screening hall.

Between the exhibits, films, speakers and a special silent auction benefitting the CAEE, there was also time for participants to

enjoy a special filmmaker forum. Saturday morning, the filmmakers and interested viewers gathered in the screening hall to discuss the dynamics of the environmental film industry. Questions and suggestions about the industry and the changing economics behind it all were floated around. As a result, insight to individual challenges, as well as what it takes to make a film in these times, were all discussed.

Overall, the combination of

open discussion and informative exhibits created a positive atmosphere despite the often-disturbing facts presented in the films. With the innovative, passionate, not to mention extremely friendly curators of this film festival, there should be no doubt that it will continue to expand in scope and excellence. As it stands now, it is already a solid product; one that all citizens concerned about the environment should look into attending in the future.

Faculty Spotlight: Carl Mitcham

Zach Boerner
Copy Editor

The European Commission (EC) recently appointed Carl Mitcham, a professor in the Colorado School of Mines's Liberal Arts and International Studies (LAIS) department, to an Expert Group on the Global Governance of Science. The group's task is to determine how to equalize scientific investment in the European Union (EU).

"Some countries like Germany have very strict laws against stem cell research, while other countries, like Greece, do not," said Mitcham. "Should there be any policies that all states should adopt?"

These policies and laws are very important to the EU because places like Singapore are considered ethics-free zones. While what happens in Singapore may not seem to affect the EU at first glance, many companies want to migrate to places where there are fewer regulations because they can make more money.

The group seeks to find out what policies to implement that would educate the EC about the problem. They will study the problem and compile a report on how science affects society, how scientists govern science internally, and how governments govern science externally.

Internal governance can change quite a lot from country to country, which also poses a problem for the group. In the United States, there are privately operated professional organizations open to all, whereas in China, all the organizations are government-run. The EC, and by extension the EU, want to know whether these differences are fine

or whether the EU should pressure countries like China to give scientists more freedom.

The Commission picked Professor Mitcham as the US delegate because he was the senior editor on a four-volume project of scientific articles. During that time, he made a lot of contacts and became known for his broad knowledge. The EC also wanted someone who knew US policies and concerns in relation to the scientific world, and Carl Mitcham is quite knowledgeable in those areas.

Mitcham was interested in the project because to him, "the real question for the future is not how we're going to manage guns and whether we're going to have the right to have guns, but whether we're going to have a right to knowledge." Governments are much less restrictive regarding tangible objects than they are with knowledge, and the debate comes down to whether or not this trend should be changed, and if so, then how it should be changed.

"[The US] is not aware of the need to govern the productivity of knowledge," said Mitcham. The European Union is much more focused on the problems facing humanity in the coming years and the "EU is the world leader in asking these kinds of questions." What the group decides will impact future generations and the development of science for many years to come.

Mitcham is optimistic about the project. "I'm learning a lot," he says. "I hope I can contribute a little. I hope to bring some of these people to CSM." Mitcham hopes that in the near future, the US will catch on to the trend of

asking these kinds of questions, but says that in the meantime, "we've all got to know more about how things operate in the rest of the world."



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Intelligent coatings for variable environments

Greg Davies
Staff Writer

Many intellectuals note that one can't judge a book by its cover, but, for one research group at the Colorado School of Mines, it's only the surface that matters.

The Advanced Coating and Surface Engineering Laboratory (ACSEL) examines component surfaces in an attempt to classify properties such as resistance to corrosion, wear and oxidation, as well as wetting or non-wetting surfaces, emissivity, reflectivity and magnetism.

The research conducted in ACSEL is largely industry-driven. "Even those ACSEL research programs that are funded by government agencies such as Department of Defense, Department of Energy, National Science Foundation, have originated from an industrial problem," stated Dr. John Moore, the director of ACSEL. In fact, Moore noted that "about sixty percent of our funding comes from industry and forty percent [comes] from government."

The fact that ACSEL research is funded primarily by industry demonstrates the high demand by, and immediate practical applications for, the manufacturing community. According to Moore, ACSEL generates "about one million dollars per year."

Moore also explained that coat-

ing technologies are frequently applied to "many materials [that] operate in harsh environments." Rather than using bulk materials that can operate in the necessary environment, it is oftentimes more financially viable to use an inexpensive material with a coating that provides it with the necessary durability.

ACSEL is currently working with the Air Force to develop multifunctional coatings that would provide the "ability to operate in changing conditions," said Moore. Since the Air Force requires materials to hold up in locations all around the world and under extreme situations, coatings are highly important.

In addition, ACSEL is working with companies to provide die coatings for aluminum pressure die casting and precision glass molded die coatings that are used to manufacture optical fiber interconnects and contact lenses.

Coatings are able to provide materials with important and marketable properties that they would otherwise lack, demonstrated daily by the field of optical coatings.

An entrepreneur in the jewelry business may want to simulate alexandrite. Moore explained that "alexandrite changes in color in natural or artificial light." Simulating this effect through surface coating is an example of one of the more exotic applications of ACSEL research.

Moore's research also aims to develop "smart" surfaces and inter-

faces. Smart coatings are able to respond to, and report on, stimuli, making them self-evaluating and, to some extent, self-sustaining. One area of application is smart die coatings, which can report on conditions and contribute input as to when a die should be replaced, preventing catastrophic levels of wear. According to the U.S. Department of Energy, smart coatings will "extend the die life for die casters and reduce their overall die replacement cost" and "optimize the die caster's productivity."

ACSEL is also conducting research in stimuli-responsive polymer brushes - through Professor Knauss in Chemistry - and smart catalyst systems for fuel cells - through Professor O'Hayre in Metallurgical and Materials Engineering. The potential applications for stimuli-responsive surfaces extend to numerous areas of manufacturing.

The applications of the ACSEL's research are nearly unlimited and, as such, former graduate students have found jobs in numerous engineering fields. These students have been recruited by notable many notable organizations: Hewlett Packard, the U.S. Air Force Research Laboratory, Intel and the National Renewable Energy Laboratory. "Our students will find jobs from basic industries to biomaterials to electronic industries," said Moore.

Geek of the Week...Rob

Roby Brost
Staff Writer

[Oredigger] Do you consider yourself a geek?
[Beach] Not really. [laughs] But everyone here is a geek, it's true. Mines brings out the little bit of geek in all of us.

So why do you think your roommate nominated you for Geek of the Week?
I don't know. I like rocks. And minerals. I do it for fun. And I like it.

As you don't consider yourself a geek, what is the geekiest thing you have ever done?
When I go skiing I like to bug the other skiers about the geology we pass going up or down the lift. It's fun when I'm bored.

So, of all the places you could have gone, why Mines?
I got accepted. So why not? I thought it couldn't be that hard.

Have you revised your opinion since then?
Don't do it, it's a trap! [laughs] It's worth it.

What has been your hardest class and which class do you like the most?
Mineralogy is my hardest class, but I totally dig structural geology.

What do you think about being the Geek of the Week?
I'm definitely putting it on my resume. Good conversation starter.

What's the geekiest thing you've seen at Mines?
At the beginning of the semester,

there was this party, and these two guys were in the back corner, playing some crazy fantasy game, totally ignoring the party. Well... either that or this guy sitting next to me who has fifty colored pencils...

You don't sound thrilled about those 'fantasy games'. How do you feel about videogames?
I really dislike them.

Why?
There are so many cooler things that you could be doing... Like going outside and looking at rocks. Video games give you carpal tunnel or some such thing. They just aren't healthy for you... It's not that I dislike video games, but sometimes people can play them too much.

Ok. Hit us with your best geeky joke.
Subduction leads to orogeny leads to (Mg, Fe)₇Si₈O₂₂(OH)₂

That kind of sounds like a best geeky pickup line.
No. I have one of those too. It's "Can I take your strike and dip?"

Who is your role model? Do you consider them a geek?
Mary Harper. She's taught me some crazy stuff I don't even understand yet. She's knows so much stuff, but she's not a geek. She made a super geek, though [points at his roommate].

With all of this election stuff going on right now, have you decided who to vote for?
Well shoot. No, I can't say I've decided yet.

You've recently gained a super-

A taste of the *harvest*

Final Golden farmers' market of the year

Spencer Nelson
Staff Writer

"I like that it's a chance to come down and... get some local produce, listen to some good music. [It is a] good family time," said Diane, a vendor from Arvada selling 'Old West Colorado-style Barbeque Sauce' at the last Golden Farmers' Market of the year. Every Saturday during the spring and summer months, farmers from across Colorado converge on Golden for the weekly Golden Farmers' Market. Last Saturday, as the morning sun rose above Golden, people came and went from a large square of white tent canopies and the sounds of the marching band could be heard in the distance; the Homecoming parade was in full swing. The smell of roasted peppers floated through the crowd as children watched a puppet show, a boy played his saxophone for those passing by and people met each other at tables shaded by bright rainbow umbrellas.

A variety of farmers and businesses were represented at the market, selling everything from wine to garden charms to real estate. The main product being sold was food. Apples, peaches, bread, pasta, salsa, chocolate sauce and a plethora of other goods were sampled and bought, usually for reasonably good prices. "It's cheap for the most part," said Michelle, a sophomore at Mines. The vendors love it too. Dale, a vendor from



SPENCER NELSON / OREDIGGER

All Organic. Fresh produce on display for shoppers.

Golden, loves "working because [he makes] money" and the opportunity to meet people. He has been to the farmers' market every Saturday this year selling fresh salsa. A couple from Castle Rock, who sell chocolate sauce every Saturday, think it is great to "get people's reaction to [their] product and come back for more."

A unique feature of the Golden Farmers' Market is the amount of fruits and vegetables grown locally. "I think it's great to buy local, fresh

produce," said Shauna, a Mines graduate who comes to the Golden Farmers' Market about every other weekend. Peaches, apples, corn, pumpkins, gourds, peppers and tomatoes were only a part of the variety of options for produce, almost all grown in locally in Colorado.

The sense of community was everywhere at the farmers' market. People were meeting neighbors and seeing friends, all while eating fresh Colorado food. The entire environment was laid-back and

easy-going, with children playing in the open areas amid the sounds of the young saxophone player and the generators powering the mini-donut cart and chili pepper roaster. This was not all without a tinge of sadness - this was the last Saturday the weekly market will meet until the spring. Nevertheless, the general jovial attitude of everyone prevailed, leading to a fine day of community. "Meet some neighbors," said John, a Golden resident, "I wish it didn't end so soon."

International Gro

Spencer Nelson
Staff Writer

Tucked in the corner of the first floor of Berthoud Hall is a small, easy-to-miss office with a sign in the window reading "IGWMC." What few people realize is that this is the headquarters for a resource center called upon by hundreds of companies and professionals across America and around the world. Although the International Ground Water Modeling Center is small in size, it has a noticeable impact in its field across the globe.

The IGWMC is focused on technology transfer. Current head of the center, Dr. Eileen Poeter, says that the purpose of the IGWMC is to "get information out to professionals in ground water." Their way of accomplishing this goal is through classes and conferences. "It's not so much a research center," says Poeter, "as it is a teaching center." The topics taught generally focus on computer modeling for ground water situations and "how to use different types of software." The people

CSM studen

CONTINUED FROM PAGE 1

The group is very excited. "This is the first year that we actually got [a] budget from the school," said Treants, and they are hoping to use some of that money to create other fund-raising opportunities. Support goes beyond the school and the program is fortunate enough to have local business sponsor the food that is provided during all the events. However, the program needs help for the Up 'til Dawn celebration. "We need lots of entertainment, so however local businesses can contribute is greatly appreciated!" said Burleson. The program only started two years ago and those involved are looking forward to a year in which previous fund-raising records will be broken.

The Up 'til Dawn group has a passion

ert (Bob) Beach, Junior: Geology

power. What is it and why?

Rock crushing. No, no, I want to be able to fly, that would be pretty cool.

Windows or Mac?

Windows! Macs are so confusing.

So what do you plan to do with life after Mines?

I want to travel. A lot. Look at rocks around the

world. I don't know exactly what I want to do yet. It's still a ways out... But it'll happen.

If you could be a comestible, what would you be?

I would be a Jolly Rancher.

What do you have to say to the female population at mines?

I'm tall, blond, blue-eyed, smart, geeky... and single!



ROBY BROST / OREDIGGER

ound Water Modeling Center

who would typically use a resource like the IGWMC are, according to Poeter, "a mix of consulting industry and government agencies."

The IGWMC has an exceptionally large focus, they are not just aiming for perfection in one area, but rather the flexibility to benefit as many people as possible. Poeter claims the software they promote is "totally flexible" and that it could be used to "match a site in Texas or a site in Alaska or a site in Maine." Because of this flexibility, China has shown interest in this area of expertise. In the Chinese equivalent of the USGS, "only 100 people... [serve] the entire nation of China." Dr. Poeter, in correspondence with colleagues from CU Boulder and the University of Alabama, expects their knowledge to be incredibly useful in furthering Chinese ground water treatment and other projects around the world.

Originally, the IGWMC was part of another school in Indiana until it came to the Colorado School of Mines in 1990. After losing its heavy funding from both

the federal government and the EPA in 1994, it became considerably smaller and almost fell apart. After losing the original director, Dr. Poeter, who received her BS in Geology from Lehigh University and her MS and PhD from Washington State University, stepped in, believing that she could be both a professor and the director of the IGWMC. She was director from 1994 until this last spring when she announced her retirement. She is currently still director of the IGWMC until a new professor, Dr. Reed Maxwell, takes charge.

Poeter expects Maxwell to take the IGWMC in the direction of his current research in the "linkage between ground water, surface water and atmospheric hydrology modeling." She believes this to be the future of the IGWMC and highly anticipates the cooperation between the IGWMC and the new supercomputer located on campus, Ra, to increase the power, accuracy, and usability of ground water models as they continue to be a leading center in its field.

nts stay Up 'til Dawn

to help children they have never met. They have an empathy wherein they "can almost feel the pain and strain of not only that child, but of his/her family as well. Everyone deserves a chance to grow up," said Burleson. Others found inspiration closer to home when Treants's sister was diagnosed with a tumor that wrapped around her optical nerve. While her sister received treatment in New York City, her family was fortunate enough to have the support of American Cancer society and stayed in the Hope Lodge. "That was really neat, that was the same feelings the families from St. Jude get so I said 'How I can give back?'" said Treants. No matter where the drive to help comes from, this is an amazing group that is making a huge impact by fighting childhood diseases worldwide.

St. Jude is a world-renowned hospital in Memphis, Tennessee that is dedicated to fighting catastrophic diseases of childhood. To operate the hospital costs an astounding \$1.3 million a day. The true beauty of St. Jude's is that no family is turned away for lack of finances. "They don't ask the parents to pay for it, [if] they can't, just whatever their insurance can cover," said Treant. With that in mind it is no wonder that these fundraisers, and outside involvement, are so crucial to the treatment of these children in need. "The hospital performs miracles every day, and it is a blessing these children have somewhere to go!" said Burleson. If you or anyone else you know is interested in getting involved send the program an email at utd.mines@gmail.com and be a hero, save a life.

Students receive foreign study scholarship

Cameron Cotten
Staff Writer

Six Mines students were recently granted KAUST Discovery Scholarships to study at the King Abdullah University of Science and Technology (KAUST). If you have never heard of KAUST, don't be surprised: the graduate university is opening its doors for its first class of students in September 2009. The university is currently under construction about an hour north of Mecca, on formerly unoccupied land. The Discovery Scholarship covers tuition and a generous living stipend for the students for the duration of their graduate studies, as well as paying for their remaining undergraduate tuition. As its name would imply, the university is a technical school that is focusing on contemporary issues in areas such as nanofabrication, bioengineering, supercomputing and water desalination. Recently, the *Oredigger* had the opportunity to interview five of the recipients from Mines: Matt Bolt, Ryan Decker, Alexander Gan, Dan Lecocq and Mark Malone. Mark Rosa was not available at the time of printing.

Oredigger: Why KAUST?

Alex: KAUST is an experiment, something that has never been tried before. It is a university from nowhere.

Matt: They are drawing professors from established schools, so we will be getting a quality U.S. education.

Decker: Plus it's a full ride!

Mark: I'm looking forward to experiencing Saudi Arabian culture.

Dan: The scholarship looked great. The Middle East is becoming more important in the modern world and not many people get to go to Saudi Arabia.

Oredigger: Were you considering graduate school before this?

Alex: I was considering a master's degree, but I was thinking about working for a while and then starting school again.

Matt: My parents encouraged me to check it out, and when I learned all about what they were offering it was a no-brainer.

Oredigger: How do you feel it will be different being at a brand new school and community?

Matt: We're used to cultural mixing in the U.S., so I don't think it will be as hard for us as people from other places.

Alex: The Sharia [Islamic religious law] will not be held strictly, because it is like an American compound in the country. It will be a true mixing bowl.

Mark: I'm getting married in March, so it will be a challenge for myself and my wife to adjust to married life and a new place at the same time.

Dan: I'm excited to start new traditions like the M-climb here. We are the inaugural class, so we get to set the precedent.

Oredigger: What have you had to give up or compromise for this?

Ryan: I have to give up the pos-

sibility of getting married for the next three years. Also, I will be missing a lot of friends' weddings.

Alex: I will be missing out on a lot of family life. We only get one trip home per year. There is also a lot of risk involved, because this university is an experiment.

Matt: We have to give up starting a career and progress in that.

Oredigger: How does this fit into your future plans and career choices?

Matt: I want to work abroad, so this is a great opportunity to network and meet people.

Dan: International experience is a plus for what I want to work in, so studying in the Middle East is good for my resume.

Ryan: I'm doing research in water desalination and I might have a career in that someday.

Oredigger: Do you have any closing thoughts for the readers?

Ryan: I want to thank the school and KAUST.

Mark: This school is very highly regarded in the region. All of the applicants from Mines were accepted, while only about 20% were accepted overall. I want to thank Mines for the reputation that we have.

Alex: Thanks to Kay [the director of international programs].

Dan: It's going to be hot.

The recipients would also like to inform all students that KAUST is presenting at Mines again on Thursday, October 16. Contact Kay Godel-Gengenbach (kgengenb@mines.edu) for more information.



Taya, Recruiter

"Schlumberger gave me the training and support to progress beyond my expectations."

Taya has a Bachelor's degree in Petroleum Engineering. After four years working on clients' platforms delivering technology services to Oil and Gas companies, Taya has moved to the personnel function and is now sharing her experience with young graduates.

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Coming home isn't always easy

Keegan Hammond
Staff Writer

With both Colorado School of Mines (CSM) and Mesa State coming into Saturday's Homecoming game undefeated in Rocky Mountain Athletic Conference (RMAC) play, this big rivalry game was going to be the one to watch. Apparently RMAC thought so too, and dubbed it "the game of the week" and thus televised the action live on Altitude Sports.

Before the game, Mesa State Mavericks head coach Joe Ramunno said that "Mines is a very solid team in all phases of the game. The players are very talented

and well coached. We know that our hands are full." As a member of the Maverick's team, Alex Dorothy also said, "Our offense is going to have to be very physical and establish the run early in order to open up the play book later in the game. On the defensive side of the ball we're going to have to try and contain Mines's tough passing attack in order to let the offence control the game." Perhaps they were just being polite while in anticipation of visiting CSM, but those were well-earned compliments from our rival team and they speak playbook volumes about Mines's football program.

Compliments aside, Mesa won the coin toss and was the first to score on an 87-yard drive that took 13:06 off the clock. The Orediggers were unable to answer the Mavericks' scoring drives and the first quarter ended with the Orediggers trailing 14-0.

What a difference the second quarter brought when the energy snapped in the Orediggers' favor. The game began to turn around with an amazing kickoff return by Cory Huck to jump-start the Oredigger offense. The Mavericks were unable to answer this home-field drive and the first half ended with a score of Colorado School of Mines 7, Mesa State 14.

Athletics Hall of Fame inductee, Marv Kay, 1963 Mines graduate, football/wrestler and Denver Broncos team member was honored during the Homecoming half time show. Traditions run deep when coming home, and spectators were not disappointed. They were treated to spirited performances by the cheerleading and dance teams, and the famous "splitting of the atom" by the marching band. In true homecoming fashion, royalty was announced and floats were displayed to the delight of the home crowd.

Concentration from each side lapsed when play continued, as the third quarter was plagued with penalties for both teams. The great minds of the Orediggers were able to quickly answer back to a Mesa 27-yard field goal.

After an illegal helmet to helmet hit between Mesa State and home quarterback David Pesek, a 15 yard personal foul resulted against the Mavericks and the Orediggers were then unstoppable. Each of the following four plays resulted in CSM first downs and after 11 plays, 80 yards, and 5:18 burned off the clock, Mines scored a sweet



PATRICK BESEDA / OREDIGGER

home touchdown complete with a well-kicked extra point. With 1:31 left in the third, Mines' Hunter Wardlaw recovered a messy Mesa fumble that lead to another Orediggers touchdown only 7 seconds into the fourth quarter.

Mesa State learned their lesson about making mistakes around the Oredigger defense. When they fumbled the first fourth quarter kickoff return, Mines's Kyle Goracke recovered and scored another Oredigger first down. A valiant, but failed, 17-yard field goal attempt was then made by CSM freshman kicker Colin Baker. Minutes later, after a questionable and detrimental call against the Oredigger's favor, Baker then returned to the field to redeem himself and cinched a more difficult 30-yard field goal putting Mines ahead 24-20. The next Mesa drive, however, resulted in a Maverick touchdown to adjust the score 27-24. The Orediggers, after a holding penalty, did not have enough time to cover the ground needed, and resulting final score was Mesa State 27, CSM 24.

After the heartbreaking homecoming loss, CSM head coach Bob Stitt said that "the first half we did not play well, on our offensive side they weren't rushing and we had little answer in the 2nd, we can't get down like that." Looking back, he commented that his biggest disappointment was "getting into the red zone (within 20 yards of the goal) twice and only getting three points." Overall he concluded, "We had a chance to win, and I'm proud of the boys for that." When asked how he believes this affects the chances of winning the Conference title, Stitt said, "There are a lot of good teams in our conference and there is a chance for them to get knocked out. All we have to do is go out and play the best we can and see what happens."

Next, the Orediggers travel from home to Gunnison, Colorado to challenge Western State on October 11 at 1:00 PM. We wish our home team good luck and safe travel.



PATRICK BESEDA / OREDIGGER

Parity not apparent in MLB playoffs

Matthew Pusard
Content Manager

It's not a good time to be a fan of Midwestern teams. The region may have the Cubs, White Sox and Brewers in the playoffs, but all three were on the brink of elimination as of Saturday.

That has been the story of the 2008 Major League Baseball playoffs thus far. Only the 163rd game of the season was close. That match, between the Minnesota Twins and the Chicago White Sox for the American League Central Championship featured strong pitching and sparse offense. Jim Thome hit his 541st, and possibly most important, home run of his career in the seventh inning to break the scoreless tie and give the Sox a 1-0 win. John Danks pitched eight strong innings for the White Sox to receive the win.

Since that play-in game, it has been all downhill for the South Siders of Chicago. The Tampa Bay Rays, making their first playoff debut, gave the White Sox more than they could handle in the series' first two games. Evan Longoria, a favorite for American League Rookie of the Year, matched a record with home runs in his first two playoffs at-bats and the Rays cruised to a 6-4 victory in game one.

The big story of game two was Rocco Baldelli, who was diagnosed with a mitochondrial disorder in spring training. The disorder sapped his energy, caused "exercise intolerance" in his body and put his baseball career in jeopardy. Fortunately, the treatments for his disorder worked, and Baldelli, one of the

Rays' longest-tenured players, was able to return at the end of the season for their first-ever playoff run.

Game two was his first playoff appearance, starting as designated hitter, and the Rays cruised to a 6-2 victory with Baldelli's 8th inning run putting the exclamation point on the win. The Rays have no playoff experience while the White Sox won a World Series just three years ago, but the Rays are looking like the more veteran team in this series.

The north side rivals of the White Sox, the Cubs, aren't faring any better. This year is the 100th since their last World Series victory and the Cubbies are on the verge of making it 101. The Los Angeles

Dodgers, behind the bats of Manny Ramirez and Russell Martin, won the first two games by a combined score of 17-5. The midseason trade for Ramirez changed the complexion of the Dodgers and they appear to be the National League favorite to play in the World Series.

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WHAT'S HAPPENING IN THE CAREER CENTER

These are the upcoming Career Center hosted events! Students, please sign up on DiggerNet as many information sessions offer refreshments and handouts and need to plan ahead.

Sunday, October 5, 2008			Majors Encouraged to Attend
7:00 – 8:00 PM	Student Center Ballroom D	ChemE, Mech, Ma, Met	
Monday, October 6, 2008			
5:00 – 6:00 PM	Student Center Ballroom C	ChemE, Geo, Mech, Civ, PE	
5:00 – 6:00 PM	Geology Museum, Conference Room	ChemE, All Eng Geo, GeoP, Ma, Mining, PE	
6:00 – 7:00 PM	Student Center Ballrooms E	PE	
7:00 – 8:00 PM	Student Center Ballrooms A & B	ChemE (Bio),Civ, EE, Mech PE	
Tuesday, October 7, 2008			
5:00 – 6:00 PM	Student Center Ballroom C	ChemE, EE, Mech, Ma, Met Econ, Mining	
5:00 – 6:00 PM	Brown Building, Room 204	Geochem, Geo, GeoP	
6:00 – 7:00 PM	Student Center Ballroom A	PE, ChemE, Civ, Mech, Envir,EE Ma, Met, ETM	
7:00 – 8:00 PM	Student Center Ballrooms C	PE	
Wednesday, October 8, 2008			
5:00 – 6:00 PM	Student Center Ballrooms A	GeoP, PE, Geo, Geochem	
6:00 – 7:00 PM	Student Center Ballroom E	Geo, GeoP, PE, Mech, ChemE	
6:00 – 7:00 PM	Student Center Ballroom C	Econ, Geo, Min Econ, Mining	
7:00 – 8:00 PM	Student Center Ballrooms D	Geo, GeoP, GeoChem	
Thursday, October 9, 2008			
5:00 – 6:00 PM	Student Center Ballroom C	ChemE, EnvSci, Geo, Mech, Mn, Met	
5:30 – 6:30 PM	Brown Building, Room 201	Geochem, Geo, GeoP	
6:30 – 7:30 PM	Geology Museum, Conference Room	ChemE, Mech, PE, Geo, GeoP EnvSci	
5:30 – 6:30 PM	Brown Building, Room 204A	Civ, Elec, Env, Mech and EngSys	
Friday, October 10, 2008			
No Information Sessions Today			

Minds at Mines

Alyssa Volk
Staff Writer

"I got pulled over on Easter for running a stop sign that I did not run. I will not say the officer's name, but he pulled me over for running the cul-de-sac stop sign by the Recreation Center. The officer was over by Meyer Hall when I was stopped at the sign, so she could most definitely not see me! I had three people in my car that could attest to this. There were bushes and buildings blocking that stop sign. I had to pay 50 dollars for the ticket. But then again, I have been pulled over for driving drunk when I was sober."

Ashley Laughlin



COURTESY ASHLEY LAUGHLIN



COURTESY KEITH TURNERY

"The Mines Police Department provides proactive patrol of the campus and its facilities, investigation and reporting of crimes and incidents and motor vehicle traffic and parking enforcement. It also deals with crime and security awareness programs, alcohol/drug abuse awareness and education and community outreach such as self defense classes. Consultation with campus departments for safety and security matters is also available. Additional services to the campus community include: vehicle unlocks and jumpstarts,

community safe walks (escorts), authorized after-hours building and office access, parking registration and assistance in any medical, fire or other emergency situation."

"The CSM Police Department benefits the campus community by providing full-service law enforcement and emergency response from a campus managed agency that understands the different challenges that exist in a higher education campus environment."

"I am motivated to be a police officer by trying to provide the highest level of service to the Mines community, while also being responsive to the changing nature of the campus environment."

Keith Turney, Chief of CSM Police

"Public safety is too strict. It seems like they are here to only give us tickets, rather than to protect us. Plus, they make me nervous when they drive by really slow and watch me."

Brittany Rummel



COURTESY BRITTANY RUMMEL



ROBY BROST / OREDIGGER

"Officer Krause up at Mines Park does a great job at keeping everyone in line. That first week of school, I locked my keys in my apartment. None of my roommates were home, so she helped me get into the apartment. Public Safety keeps a good eye on everything and helps us out in any way we need it. It is a secure atmosphere and I always see officers patrolling, keeping an eye on things."

Elliot Matthews

"For the most part, what Public Safety tries to do is keep our campus safe. They constantly patrol, trying to keep people from taking things from campus, etc. They do a pretty good job because we have not had anything really bad happen at CSM. However, a lot of students interact with them only through parking tickets, and things of that nature. This gives them a bad rap when they are really only doing their job."

Jordan Revielle



ROBY BROST / OREDIGGER



ROBY BROST / OREDIGGER

"My friends and I walked down to Safeway and bought a big crate of water. We borrowed one of those little shopping carts to take it home, but we were going to return it when we were done. One of the Public Safety officers pulled us over and told us it was theft to take the shopping cart. The officers tend to overreact to silly things. I mean, my friend and I are in college. We do stupid stuff. But besides occasionally overreacting, the officers do their job just fine."

Phylicia Saner

Principally Irked

More than an election

Andrew Aschenbrenner
Opinion Columnist

It has now been over 86 weeks since Barack Obama announced his candidacy for President, and almost 75 weeks for John McCain. That's almost 10 and 8 months, respectively. Tired yet? After a primary season that seemed worthy of the geologic time scale, as well as the party conventions and bailout season, I could use a break.

Unfortunately, it just doesn't work that way. This is the most important time of the campaign season, and as much as I want to recoil from the latest political ad, I still sit through the analysis and debate because I feel the need to be informed. This election is not about John McCain and Barack Obama. It is a referendum on whether or not we citizens are 'asleep at the wheel.'

No one is insulated from the key issues facing the United States of America in 2008. As we are seeing with the mortgage and credit crises, the struggles of the middle class are catching up to Wall Street. Civil liberties make the difference in gun rights, abortion rights, and everything in between. Whether you like it or not, your government has a large say in how you live, although I think most would agree that it

should not.

It would be a whole different ball game if things were how they should be. But things are how they are. The responsibilities of an effective citizen are many, but first and foremost is the duty of being vigilant against threats, both foreign and domestic, to our collective way of life.

That involves being informed, which is the best way to fight the

This is the most important time of the campaign season

excesses of government. The media makes this job increasingly difficult, but the information is out there. It is easy to break this election down to Obama vs. McCain, but when it comes down to it, the choice for president only goes so far.

Many people hate elections and campaigns. I understand that.

But I bet even the people who find themselves unable to watch any of the political circus care deeply about certain issues. These are the issues that are truly addressed only with citizen involvement. Candidates and office-holders are not equipped or willing to do the hard work. Citizens are.

It is time for America to return to its roots. This is a country founded on documents called the Declaration of Independence and the Bill of Rights. One is a strong indication of the spirit of this country. The other is a masterpiece that provides for civil freedoms and a collective recognition of personal liberty. We have strayed from these documents.

This fact infuriates me, but what about you? A vote in the upcoming election certainly records your voice, but we have seen that that is not enough. Do you expect government to automatically do work for you? A country stands on its citizens. You, yes YOU, are the most important part of your country. You, dear reader, represent the strength of your nation.

Our nation is on a journey to revolution. The circus-campaigns

are largely extraneous material. Please understand that the choice for president is largely cosmetic. To be satisfied with a change in leadership is naive and unfortunate. Are you committed to doing more? You are just one person. What will you do? What can you do? Nothing. And everything.

It is easy to break this election down to Obama vs. McCain, but when it comes down to it, the choice for president only goes so far

Vice-Presidential debate

A liberal reaction

Michael Rose
Staff Writer

As many predicted, the vice-presidential debates were not only interesting, but informative. Sarah Palin and Joe Biden faced off against each other and, unlike other years, their debate actually mattered. For one of the first times in the history of political debates, the vice-presidential debates actually held some sway for people. Certainly, they always play a role, but over the past year we've heard more than

I believe there's an excellent reason that the McCain campaign has kept such a tight grasp on Palin's public performances

forum for two relatively unknown figures to show their views and, in my opinion, it was a success. It took several questions for both candidates to warm up and begin to give answers, though Palin's responses were quite obviously coached and rarely had much substance. Frequently, her responses would completely ignore the moderator's question. I believe there's an excellent reason that the McCain campaign has kept such a tight grasp on Palin's

public performances, and she certainly proved that in previous public appearances. Surprisingly, Biden avoided the gaffes that he is famous for and put on a relatively decent performance.

I can't imagine that it's easy being thrown into the limelight after a rather small career up until that point versus the rather long and higher-caliber political career of Biden. Both Biden and Palin almost argued the same points.

Both agreed on similar points, but argued over them as a matter of principle, including their connection to the common "Joe Six-pack" American, which many credit as Palin's claim to office in Alaska. "I think we need a little bit of reality from Wasilla Main Street ... brought to Washington, D.C.," Palin said, though what kind of reality someone who believes that man and dinosaur co-existed six thousand years ago would bring to Washington D.C. remains unseen.

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Fool's Gold

"No diaper changing in Miner League Sports"

Lighting the M

New methods aim to cut down on energy, freshmen.

Tim Weilert
Energy-ologist

Several hundred people gathered on the IM fields Friday night as Blue Key unveiled its new plan to light the historic CSM 'M.' Located on Mt. Zion, the M has been a marker in the foothills for the last 100 years and has been illuminated for the better part of the last decade. However, in recent months, the price of everything has increased, including giant M shaped light bulbs. The current configuration, which relies on a single, 60 Watt, three-ton, custom-blown glass bulb, has been causing Blue Key some trouble.

"In this new energy economy, you have to think outside the box," said Golden Mayor Jacob Smith, "that's why we are so proud of what the School of Mines is going to do."

The plan, as it stands right now, is to lure incoming freshmen classes into the razor-wire

protected area surrounding the M during the annual Mt. Zion climb and whitewashing. Once inside, Blue Key will lock the gate, effectively trapping the class of 2013 inside the M. In exchange for water and food, the freshmen will be required to light candles every night and form the M.

Blue Key considered several alternatives, such as LEDs or fluorescent bulbs, but decided that those options were not viable. "LEDs!?!?" exclaimed Blue Key chairperson Steve Meyerhoff. "If we used something that bright we would probably cause airplanes to veer off course and crash into the nearby hills."

The change in lighting will save CSM dozens of dollars each year, improve the school's smug sense of satisfaction and will hopefully "stick-it" to those enviro-hippies in Boulder for getting a better Sustainability Report Card.

"Nobama" car disgraces Republicans everywhere

Lack of creativity overcompensates for small shoes

Mike Stone
Republican

As many students and staff have seen over the past couple weeks, there is a bright-orange car now frequenting the campus. On it is spray-painted the phrase, "Nobama" several times with a big number 01 on the side as though the owner would enter the car in a race. Fortunately, there are demolition derbies in Denver and that's where the car should go.

Hi, I'm Mike. As a republican, I feel urged; nay, have the duty to set the story straight for all democrats on campus: This car is ugly and nobody likes it. Allow me to explain...

1) **Make and model.** A 1999 Honda Pos is trying to make a political statement. Not a Hummer H2. Not a F-350 Truck. Not even a Mustang. A Honda Pos. Is this the type of message you want to send, "I don't like your political views so, look at my [expletive deleted] car?" By the way, you don't even have hub caps.

2) **Spray Paint.** As opposed to my unlimited Ace-Hi bar tab, EVERY expense was spared in the painting of this car. A quick trip to Home Depot and ten cans of spray paint later, your car looks

sickly and disgusting. No trip to Maaco? No professional pin stripping? How are you going to change my mind if I can barely look at your car without throwing up?

3) **Slogan.** "Nobama" shows a real lack of commitment. There are any number of politically correct, cut downs that could have been ten-times as effective in getting your message across. By taking a candidate's last name and adding one letter to it, you're only dropping yourself to the level of illiterate, back-woods country folk in the South. I thought we went to the School of Mines? (I know those last two sentences were probably above your head, so I'll let you know I'm calling you stupid.)

4) **Please don't speak for us.** It is a shame that only the nerdish and crazy people speak for the whole. I have my opinions and you have yours. There is a discourse amongst republicans and democrats that has held true through highs and even depressions and wars; we sling mud on commercials, lie to the me-

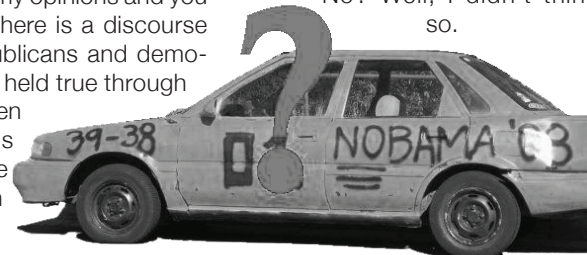
dia and have secret affairs of all types until they are discovered and we resign! It's a time-tested method that works for both sides of the aisle!

Just to really drive this point home and make everyone stare as the driver visits campus, here's one more shot below the belt.

5) **Why?** Why did you do it? Was it for the Obama visit? Was it to boldly declare your beliefs to all who are stuck behind you at a green light when you can't shift out of first gear?

Or was it because you thought you'd change someone's mind? Like some uniformed voter might see your car, smack themselves on the head, and go, "Eureka! That car says NO Obama, so I'm going to listen to the spray paint! Ah! It's been so obvious all along! All I needed was a sign and here it is!"

No? Well, I didn't think so.



MIKE STONE / OREDIGGER

School to be renamed

Welcome to the school of "Mimes"

Benjamin M. Weilert
Silent Artist and Telekinetic

In a move to increase enrollment, CSM made the decision to add two new schools to the already existing "Mines." This next fall, students will have the opportunity to go to the Colorado School of Mimes and the Colorado School of Minds. The new schools shall remain independent of the original school and will be independent from each other.

"We want this university to be as well rounded as the other Colorado institutions," said Mines' Dean, Jimmy "Sausage" Dean. CSM has been criticized for only being focused on science and technology, with only a minor involvement in both the liberal and psychic arts. Land has already been purchased with the intent of constructing the two new schools.

With a focus on the silent art of the pantomime, the Colorado School of Mimes will also absorb the LAIS department from Mines. Many of the courses that will be offered

at Mimes will include introductory classes like "Facepaint 101," "Introduction to Black Clothes," and "Basic Silence Theory." As students progress through the program, they'll learn how to get out of an invisible box, walk against the wind, pull an invisible rope and lean on an invisible box. Mines Little Theatre and Mines Improvisation Theatre will also be transferred to Mimes, where they will undergo changes to make them serious theatrical endeavors.

The Colorado School of Minds will be the leading psychic school west of the Mississippi River. "The idea behind Minds will be to unlock the dormant powers of the human brain," remarked Minds' Dean, James "Actor" Dean. A graduate of the Minds program should be able to control all of the psychic powers available and known at the time. Psychokinesis, mind reading, retrocognition, telepathy, precognition and clairvoyance are all skills that will be in the students' repertoires.

Naming rights for the new buildings have already been snatched up at an alarming rate. The main building that will house the School of Mimes will be named "Marcel Marceau Hall", while the School of Minds will have "Edgar Cayce Hall". Students who are currently failing at Mines will be given priority registration in the two new schools. "We want these students to stay within the university and welcome anyone who wants to make the switch," commented Mimes' Dean, Dean "Singer" Martin.



BENJAMIN M. WEILERT / OREDIGGER

CSM Logo. The new logo will include all aspects of the university.

Student center pianists planted

Janeen Neri
Undercover Musician

Campus officials revealed Thursday that the dozens of "students" who play the piano in the student center are, in fact, hired for the job. "Well, I guess we didn't figure we'd get away with it for so long," said Student Center Environment Coordinator Andrew Tebard. "I mean, really, is it *possible* for one, 3,000 student campus to have that many virtuosos?"

The plan started as an innocent way of improving the ambiance of the student center. "We definitely were working uphill there - I mean, the bus tub is pretty much minus 5,000 Environment points right there," said Tebard. The SCE determined that the best way to counteract the foul-smelling tub was with soothing music, and the Environment Improvement Through

Soothing Piano Music Played by People that Look Like Mines Students Plan was initiated.

The SCE began with a small core of two EITSPMPPLLMSPP recruits, piano prodigies who had recently graduated from a local music college. They were instructed to come into the student center at alternate hours, as if they were in fact Mines students just coming in to practice a piece or two. To add to the realism, they would occasionally play *Chopsticks* repetitively or come to the student center at 10 pm and act as if they were practicing their scales.

As the EITSPMPPLLMSPP program grew, SCE coordinators found themselves more tied up in the story. "If someone had asked me at the beginning," said Tebard, "I would have laughed and told them what we were doing. But eventually it got to the point where so many people believed it, it was like an inside joke. No one wanted

to spill."

A freshman finally discovered the hoax. "It was really an accident," said Robert Tumnus of his realization, "I was going to ask the girl at the piano a physics question, right, because she looked like one of the girls in my physics class who always ends up being right. So I asked her, but it wasn't her when she turned around, but I talked to her anyway. Well, she said she'd never taken calc! And that her favorite subject was *literature*! After I finished puking, I knew something was up."

Tumnus confronted SCE with the information, and the coordinators issued a public statement explaining that the pianists were not actually Mines students. "Really, do you expect Mines students to be talented in math, science *and* music?" said Tebard. "It's not like math and music are linked or anything."

sudoku

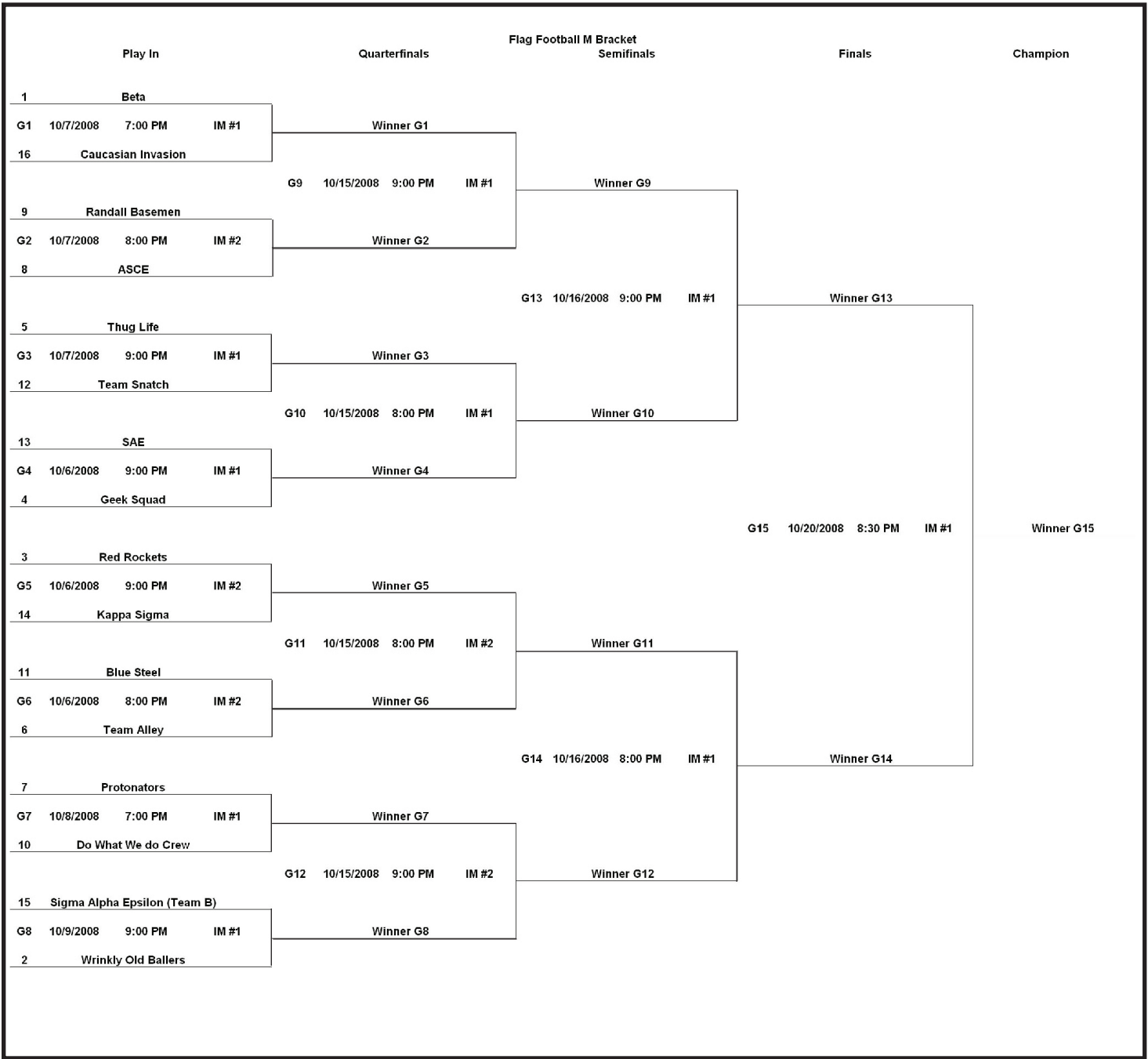
4				8				
		2			3	6		
8	6	1				2		3
				9			5	
			8		5			
	2			1				
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		8	6			5		
				7				1

Puzzle by websudoku.com

solution

8	1	2	3	5	7	6	9	4
3	4	6	8	1	9	2	7	5
5	9	7	4	2	6	1	3	8
4	8	5	9	3	1	7	2	6
9	2	1	7	6	5	4	8	3
6	7	3	2	4	8	5	1	9
1	6	8	5	7	3	9	4	2
2	5	9	1	8	4	3	6	7
7	3	4	6	9	2	8	5	1

Puzzle by websudoku.com



WOMEN'S FLAG FOOTBALL PLAYING FOR 3RD & 4TH

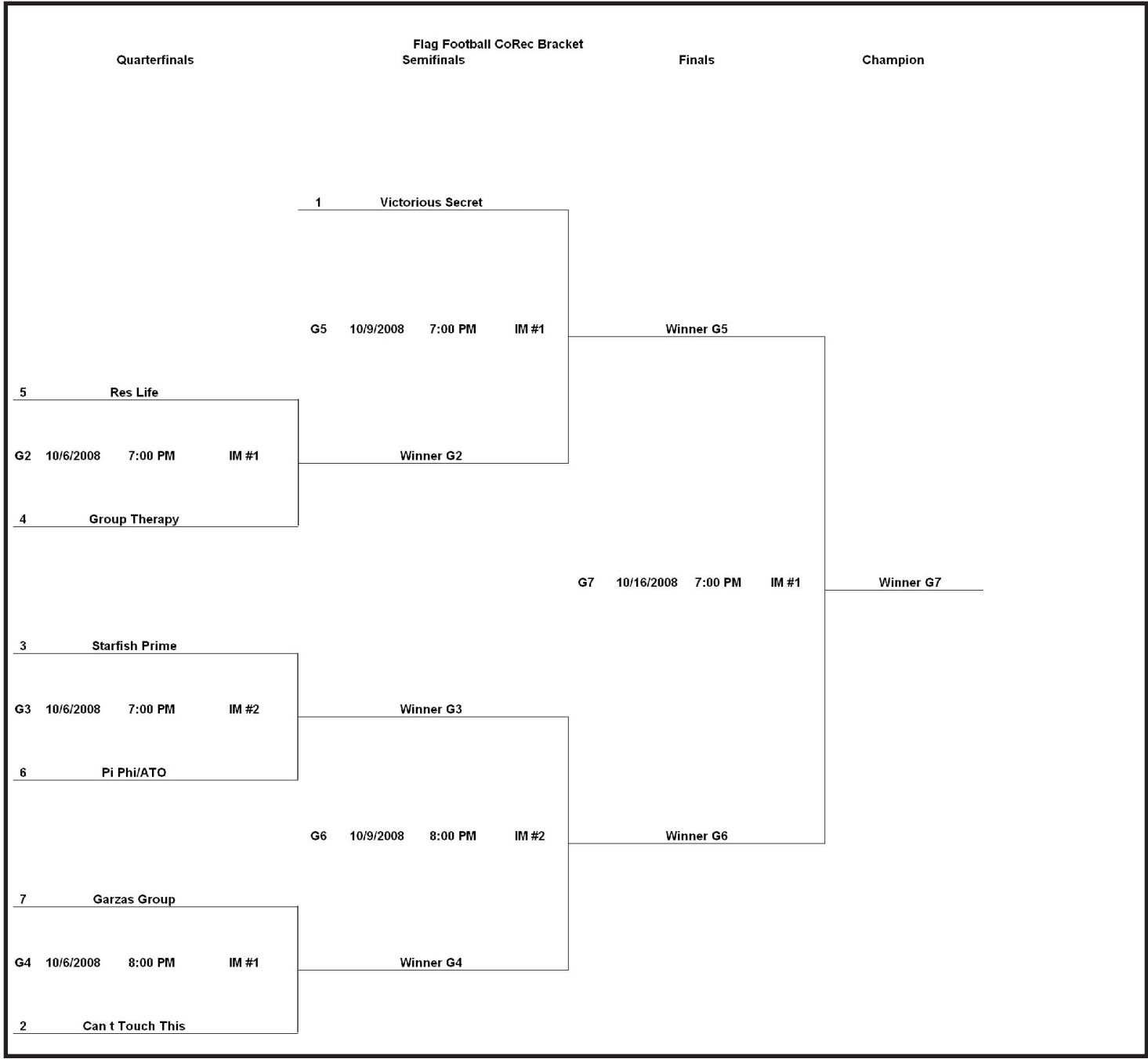
WEDNESDAY OCTOBER 8TH - 8:00 PM

SIGMA KAPPA VS. PI PHI



WEDNESDAY OCTOBER 8TH - 9:00 PM

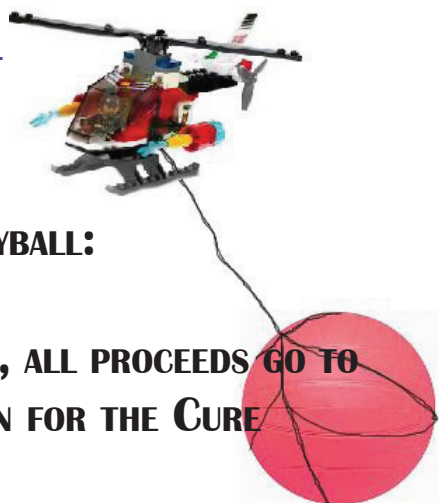
WOMEN'S CHAMPION FLAG FOOTBALL GAME:



INTRAMURAL DEADLINES

BIG PINK VOLLEYBALL:
10/9

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SUSAN G. KOMEN FOR THE CURE**



CLUB GAMES

WOMEN'S RUGBY
SUN. 10/5@ 10:30AM
IM NORTH



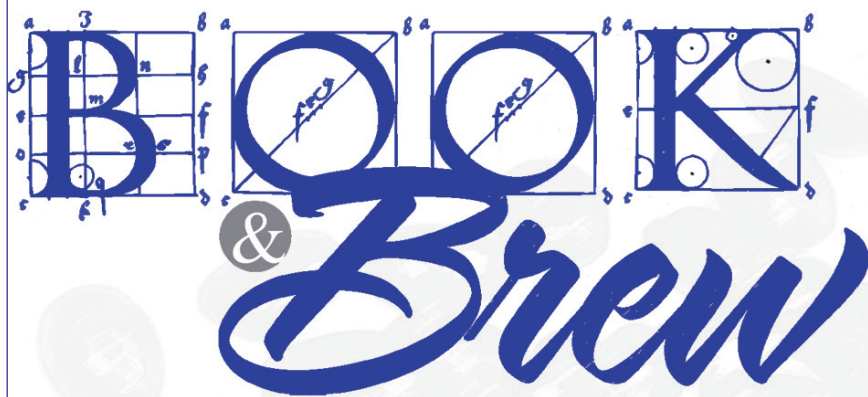
ACTION KART RACE:
10/9

BOWLING:
10/30
-4 PER TEAM
MAX 24 TEAMS



WOMEN'S SOCCER
SUN. 10/5@ 1PM
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